BRUNING

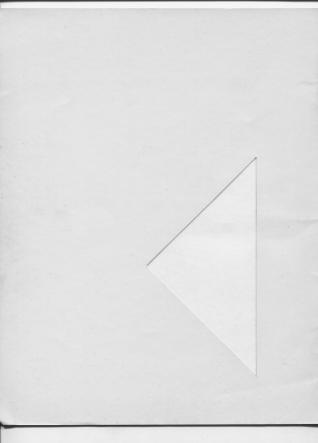
model

300

INSTRUCTION and

PARTS MANUAL

CHARLES BRUNING COMPANY . INC



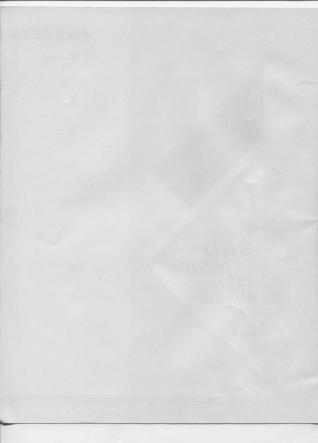
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model

300

INSTRUCTION and PARTS MANUAL



# BRUNING

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## GUARANTEE

This manual is presented as an introduction to initial machine use. Consult your Bruning Man to avail yourself of the fullest possibilities, uses, and optional equipment for your Copyflex machine.

The Charles Bruning Company guarantees the parts of this equipment against defective material or workmanship for a period of six months after installation.

The Lamp is covered by a separate guarantee, providing the Lamp Guarantee Card is properly filled out and mailed immediately following installation. Lamp breakage is not covered.

The Charles Bruning Company reserves the right to modify specifications or design without incurring the obligation to change machines already sold.



Printed in U.S.A

32 1"

SUPPLY CORD 3-WIRE 140 IN. LONG

## **SPECIFICATIONS**

## POWER

110 - 130 volt. AC

60 Cycles

Sinale phase

18 Amperes

## B. T. U.

6760 per hour (maximum)

## EXHAUST VOLUME

85 C. F. per minute

## WEIGHT

Net - 322 pounds

Crated - one crate - 370 pounds

Crated for export - one crate - 490 pounds

## CRATE SIZES

DOMESTIC

**EXPORT** 

Depth 49 inches

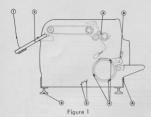
Depth 25 inches

Height 21 1/4 inches

Height 53 inches

Width 26 1/4 inches

Width 31 inches



- 1. Print tray stop
- 2. Print tray
- 3. "Floating" developer roll
- Rubber wedges on each side of cylinder
- 5. Shaft-way shipping screw
- 6. Leveling jack

### SET-LIP INSTALLATION

Normally your Bruning man will be on hand to install your Copyflex Model 300; however if you must make the installation without his help, careful attention to the information in this section will help you avoid mistakes.

### CHOOSING THE LOCATION

The Bruning Copyflex process permits a wide choice of installation sites for your Copyflex Model 300. Because the process is adorless, no fume vents are necessary. No plumbing connections are required for the developer system, nor is innecessary to provide a darkroom or subdued room lighting. You can locate the machine in almost any clean area where there is sufficient floor space for efficient operation and where the required electrical supply is available.

Check the physical data listed in the specifications section for dimensions, weight, and electrical requirements. Be sure you have the proper electri-

cal supply available near the chosen site. If you are not certain of the electrical requirements specified on your order, open the right side door of the machine and examine the nameplate mounted on the right sideplate. The complete power supply data is covered on this silver label.

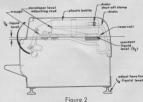
Figure 1 shows the assembled machine. After uncrating the machine, the following procedures should be followed:

- 1. Insert the four leveling jacks.
- 2. Remove the red painted screw at (A).
- Lift the cabinet section up and remove the three red painted brackets located at (B) on both sideplates.
- Remove the six (three on each side) rubber wedges ground the alass cylinder.
- Assemble the tray stop to the print receiving tray, and slip the tray into position as shown in Figure 1.
- in Figure 1.

  6. Slip the "floating" developer roll into position

#### NOTE

The Shaft-way shipping screw (5) need not be removed if the tension roll rides freely on the Shaft-way.



diazo

for BETTER prints and copies

## LEVELING THE MACHINE

Position the machine on a level surface, allowing sufficient space to open the cabinet in order to service the machine.

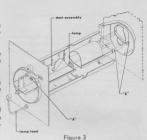
- Make sure that the shutoff clamp on the drain tube is closed and the tube positioned as shown in Figure 2.
- Raise the developer yoke assembly by Swinging the ball crank, located at the right end of the machine, upward.
- Fill the plastic developer bottle half-full of water, then cap the bottle and set it in the reservoir. The reservoir water level will remain constant.
  - Back off the right front leveling jack screw to approximately one (1) inch.
- Adjust the right rear jack screw until the water level at the right end of the trough is 1/4" in depth.
- Adjust both left side jack screws alternately until the water level at the left end of the trough is 1/4" in depth.

Minor adjustments for water level are made with the developer level adjusting stud, as shown in Figure 2. Loosen the adjusting stud and push downward to raise the developer level, or raise upward to lower the level.

#### NOTE

The level of the machine from front to back is as important as the level from right to left. Insufficient water depth in the trough after adjustment of the stud is an indication of a front to rear unlevel condition. To correct this, re-adjust the leveling jack screws.

With the machine unplugged, and the main switch off, open the cabinet by lifting upward and backward until it is in the fully opened position.



## INSTALLING THE LAMP

Careful installation of the lamp will insure maximum lamp life and performance.

- Unpack the lamp. While handling the lamp, use paper wrapped around the glass to eliminate the possibility of fingerprints left on the surface of the glass after installation. Fingerprints and other foreign materials may affect the machine's printing speeds if left to bake on the surface of the lamp.
- Remove the lamp housing covers at both ends of the glass cylinder.
- Loosen the wing nut (A) shown in Figure 3, and slide the duct assembly out from the left side of the machine. Use care when withdrawing the assembly so as not to scratch the cylinder.
- Position the lamp and snap the wire clip holders over the lamp ends.

#### NOTE

The mercury arc lamp used in this machine has a prominent nipple through which measured amounts of Mercury and other gases are injected. The nipple should always face

upwardonce the assembly is installed in the machine

- 5. Slide the lamp duct assembly into the machine. The brackets at the right end of the duct must fit into the slots of the plastic housing as shown at (B) in Figure 3.
- 6. Tighten the wing nut (A) in Figure 3 and press the two lamp connections onto the lamp ends.
- 7. Replace the lamp housing covers.



#### GENERAL INFORMATION

Operation of your Model 300 is simplicity itself once you have familiarized yourself with the operating controls and machine features. These enable you to vary the operating routine to fit the job. After the controls are set you need only feed the master tracings and sensitized paper into the machine, adjusting the exposure setting if necessary.

#### FILLING THE DEVELOPER SECTION

Mix your Bruning developer solution using the mixing jar, bottles and stirring rod supplied with the machine. A funnel is provided to fill the plastic reservoir bottle after mixing the developer.

#### CALITION

Make certain the drain hose is in the position shown in Figure 2 and that the shut-off clamp is closed, before placing the developer hattle in its bracket

## SPEED CONTROL

On the left escutcheon is the dial for the speed control (see Figure 4). To start the machine turn this knob past the red line on the dial in a clockwise direction. This starts the blower motors and the machine drive. Further clockwise rotation will increase the speed at which your prints travel through the machine. The setting best suited to your application may be determined by running a test print or two after the machine is ready. Should your print be too dark, slow down the speed; conversely, if too light, increase the speed,

#### CAUTION

Be sure the knob is set in a low range to avoid overloading the electrical components. An idling speed of 2-1/2 ft. per min. is recommended.

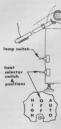


Figure 5

#### LAMP SWITCH

This control is located at the rear of the machine as shown in Figure 5. It should be turned to the "on" position and left there. This is a convenience control and is used primarily when cleaning the machine.

## HEATER SWITCH

The heater switch, also located at the rear of the machine (Figure 5), should be snapped to the "AUTO" position whenstarting themachine. This will automatically actuate the drying heaters. When the switch is in the "auto" position, the front heater operates at all speeds. The rear heater is activated at any speed above 3 ft, per min. as indicated on the speed control dial.

Should a special application warrant a modification of drying heat, the following settings are desirable:

If heat is not desired, snap the heater switch to the "off" position. Always allow a 5 minute warm-up period when the drying heat is modified. If full heat is desired, snap the switch to the "high" position, which will cause both heaters to operate at all speeds. The best general setting should be "auto". If left there the speed control will now control the lamp, the heaters and the speed of the machine, thus simplifying the overall operation of your machine,

#### NOTE

When running the machine at slower speeds, take care not to turn the speed control knob below the red line on the dial. This will turn the machine off and necessitate a 5 min. wait before restarting to allow the lamp time to cool sufficiently to start gagin.

## REVERSING SWITCH

Turning the reversing switch to the "reverse" position will change the direction of drive in order to remove or re-align incorrectly fed materials.

#### CALITION

Never use the reverse switch if the print is already passing through the developer section.



## THE BRUNING COPYFLEX METHOD

To help you understand how to operate your machine it may prove benificial to review a few facts about the Copyflex process. The Model 300 employs the Bruning Copyflex principle to produce diazo prints. Anything drawn in penall, ink, printedor typed (except in non-reproducible colors such as light bluev rolled) no neside of a translucent poper, film or tracing cloth can be copied by the process.



Figure 6

The moster tracing is placed on top of the coated (sensitized) Copyflex stock and fed into the machine where light from the mercury lamp passes through the translucent moster and strikes the coated Copyflex paper. The light cannot penetrate where the lines are on the master and thus does not strike the sensitized coating of the Copyflex paper. The exposed stock passes on through a chemical fluid developer which dyes the latent image lines, but has no effect on the areas which were exposed by the light from the mercury lamp.

After dying rapidly in the machine a crisp, dry, white print with black or colored lines (depending on the developer and paper used) is delivered to the operator within seconds after it was fed into the machine. The master tracing and print will pass through the printer section and then the exposed print should be fed into the developer slot as shown in Flaure 6.

The master is ready for immediate re-insertion to make another print, or for return to file. The fully developed print will be discharged onto a metal conveyor belt which moves the sheet over the heater area for drying and then deposits it onto the rear print tray.

#### PRINT EXPOSURE

Exposure time is dependent upon the transparency and condition of theoriginal material. Check the following table if your test prints are not up to expectation:

Table 1. Hints for Better Print

Print Condition	Cause	Correction
Greenish	Excess water in developer.	Mix stronger solution.
Brownish	Not enough water in developer.	Add 1-1/2 oz. of water to developer trough
Dark background	Insufficient exposure. Incorrect material used for master.	Run at slower speed. Use translucent stock without
		grain for master.
Weak image lines	Too much exposure.	Increase machine speed.

For information on reflex copying from opaque maters, colored paper, film and other reproduction methods, as well as short cuts in time and money, ask your Bruning Man-He's a Reproduction Specialist. He can tell you how to produce multi-colored images, copies of Polaroid sildes, intermediate masters, and a host of other reproduction variables using Bruning paper and supplies.

A complete list of the papers and developers available for your Copyflex Model 300 is shown in Tables 2 and 3.

Table II. Copyflex Developers

Catalog No.	Line	Makes Approximately
27-121	Black	12 - 14 oz.
27-122	Black	24 - 28 oz.
27-123	Black	48 - 56 oz.
27-124	Black	96 - 112 oz.
27-125	Black	five gallons

pyflex		

-	opyriex color	pevelopels
27-131	Blue	12 oz.
27-132	Blue	24 oz.
27-133	Blue	48 oz.
27-142	Brown	24 oz.
27-152	Red	24 oz.
27-161	Yellow	9 07.

Your Bruning Man can also get you such allied products as eradicators, surface cleaners and transparentizers. For expert advice on any or all reproduction problems he's the man to see.

Several informative booklets describing these processes and Bruning papers, supplies and drafting equipment are yours for the asking. Check with your Bruning Man or write to: Marketing & Promotion, Charles Bruning Co., Inc., Mount Prospect, Illinoix.



The Charles Bruning Company also manufactures an electrostratic processor called the Copytron Model 2000. This machine copies any document – and 2001. This machine copies any document – and 2001. The makes day, photo-exact black-on-white copies automatically, yet provides the lowest cost-per-copy of any electrostratic copier with a minimum of operator maintenance. See your Bruning Sales Representative to arrange a demonstration of this latest advancement in the field of business covyrian machines.

## Table III. Copyflex Papers, Cloths and Films

## COPYFLEX OPAQUE PAPERS

Catalog No.	Application	Description	Speed
25-173	For copying practically all business and	17 lb. light, std. wt., black line	3
25-175	industrial paperwork; particularly with regard to		5
25-177	mailings and filing.		7
25-193	For color-coding engineering, shipping and	18-1/2 lb. tinted stock - specify blue, green,	3
25-195	receiving and business office paperwork.	pink, yellow or salmon	5
25-197			7
25-203	For copying practically all business and	20-1/2 lb. std. wt., black line	3
25-205	industrial paperwork; especially useful for		5
25-207	engineering drawings and office system forms.		7
25-2084		20-1/2 lb. std. wt., sepia line	8
25-243	For reproduction of forms and drawings on	24 lb. heavy wt., black line	3
25-245	heavier weight base stock to resist constant		5
25-247	wear and handling		7

## COPYFLEX OPAQUE CARDSTOCKS

25-323	For prints of documents that must withstand	32 lb. cardstock, black line	3
25-325	considerable handling.		5
25-483	Tinted cardstocks are invaluable for color-	48 lb. cardstock - specify blue, green, pink,	3
25-485	coding prints for distribution purposes.	yellow or white	5

#### COPYFLEX ACETEX CONTRAST PAPERS

26-035	Ideal for use with maps, chart presentations	Acetate-coated cardstock, white
26-036	and color display work.	Acetate-coated cardstock, oluminum

## COPYFLEX OPAQUE CLOTH

26-110	For permanent prints that must withstand considerable abuse in the office or field.	Medium thickness, opaque cloth
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#### COPYFLEX TRANSLUCENT PAPERS

26-200	Used to make duplicate originals, masters or	17 lb. white base, sepia line
26-205	intermediates in either engineering or business office.	Same, meets Gov. Spec. MIL-P-9853

#### COPYFLEX TRANSLUCENT CLOTH

26-242	Used to preserve original drawings and to make duplicate originals of greater strength and permanence.	Light blue base, water repelent, sepia line

#### COPYFLEX MATTE FILMS

26-320	Used where extensive handling of originals is	Sepia coated 1 side, .005" thick
26-330	necessary and where alterations or additions	Near black, coated 2 sides, .005" thick
26-340	must be made	Sepia coated 1 side, .0075" thick
26-350		Sepia coated 1 side, .010" thick

### COPYFLEX CLEAR FILMS

26-510	For highest speed production of final prints and	Sepia coated 1 side, .005" thick
26-520	where changes or alterations will not be	Near black, coated 2 sides, .005" thick
26-530	necessary: and for projection usage.	Sepia coated 2 sides, .005" thick
26-540		Sepia coated 1 side, .0075" thick

NOTE: Speed 3 materials yield the densest image and are recommended for most reproduction work. Printing speeds are relative; i.e. speed 8 would be faster than speed 5.

## MAINTENANCE INFORMATION

The instructions included in this section are intended to cover procedures generally called operotor maintenance. These include cleaning, lubrication and ninor adjustments which can be made by the operator or in-plant maintenance personnel. For any extensive maintenance problems contact your Bruning Machine Service Representative. Fast notionwide service is available when and where you need it.

CLEANING THE DEVELOPER SYSTEM (DAILY)
Remove the plastic developer supply bottle and
drain the trough. Half-fill the bottle with warm
water and replace it in operating position in the
machine. Run the machine for a few minutes,
drain, and suceeace the trough dry.

CLEANING THE DEVELOPER SYSTEM (WEEKLY) A weekly rinsing in a solution of Bruning Roll Cleaner will aid extensively in maintaining clean developer rolls. The frequency of cleaning is entirely dependent on machine usage. Under normal eight hour operation, the developer rolls should be rinsed at least once a week for a period of 15-20 minutes. Around the clock, or exceptionally heavy usage will, in most cases, require cleaning every other day.

Follow the procedure outlined below when rinsing the rolls in the cleaning solution.

- A. Drain the system of developer.
- B. Fill the trough with the cleaning solution, making some compensation for the space the rolls will take up when they are lowered into it.
- C. Lower the developer rolls and allow them to rinse for about 15-20 minutes at machine idling speed.
- D. Drain the cleaner and add clear water to rinse the rolls of any cleaner that may remain. After about ten minutes drain and squeegee dry.

CLEANING THE GLASS CYLINDER(AS REQUIRED)
Any appreciable drop in printing speed could indicate that the cylinder is dirty. Under normal conditions, the exterior of the cylinder should be cleaned twice a week, and the interior once a

week. This should be accomplished in the following manner:

## Cylinder Exterior

- 1. Remove the cylinder scraper assembly.
- Clean the cylinder with a soft, damp cloth while the machine is operating at a slow speed. Then wipe the cylinder dry with a soft, dry cloth.

#### Cylinder Interior

- 1. Disconnect the supply cord from the receptacle
- Remove the lamp-duct assembly from the machine.
- Clean the interior of the cylinder with a soft, damp cloth. Then wipe dry with a soft, dry cloth.
- 4. Replace the lamp-duct assembly.

## LUBRICATION (MONTHLY)

Lubricate the chain monthly using a good grade of clean SAE90 or SAE30 per tole until all without of dittive. Some additives leave a varnish or gum deposit which prevents the oil from entering the chain joints. Heavy oils and greeses should not be used. Oil should be applied with a brush or spout can to the upper edges of the inner andouter link plates to allow a flow of oil between the chain link plates and to fill the pin bushing area.

## CLEANING THE MACHINE EXTERIOR

Use mild soap and water to clean the surfaces of your Model 300. Household polish may be used on the large pointed surfaces, but do not use ally polishes or waxes on the feedboard or bright metal parts which come in contact with the tracings or sensitized material.

#### SHOULD YOU NEED SERVICE

Fast, dependable, quality service is only a phone call away. Trained personnel who are prepared to help you either over the phone, or by dispatching a machine service representative, will take your call. Just ask for the Service Department when you call. By stating the details of your complaint, the model and serial number, you can be helpful in accelerating the solution to your problem. It is not unusual for trained service personnel to give a step by step account on how to make the repair or adjustment over the phone to in-plant maintenance workers.

The most important service to the machine is periodic preventive maintenance which can best be accomplished by a Bruning Machine Service Agreement. Your Capyflex reproduction equipment repreents an investment in the finest of diazotype reproduction. Capyflex is a symbol of quality . . . in design, in construction, and in performance - and into every Copyflex machine are built years and years of smooth, dependable service.

A Bruning Machine Service Agreement is a means of protecting your Copyflex investment so that It will give you the greatest possible return over the years. As with an automobile, typewriter, adding machine, or any other mechanism, a Copyflex machine will operate at peak efficiency only if given professional inspection and servicing periodically. Throughout the duration of the agreement, a Bruning Machine Service Agreement does all these thinas:

- . . . provides for essential cleaning and proper lubrication of all moving parts
- . . . eliminates unnecessary wear on moving parts
- . . . maintains factory-recommended standards of adjustment
- . . . cuts down on the need for major repairs
- . . . reduces parts replacements to an absolute minimum
- . . . protects against machine breakdowns and costly operating interruptions
- . . . keeps each machine in top mechanical condition to meet any work load large or small

Just as important as the machine itself is the kind of care and protection it gets. And just as Copyflex machines are designed and built by experts, the professional inspection and servicing provided by Bruning Copyflex machine service representatives are the finest. These factory-trained representatives know and understand Copyflex machines thoroughly . . . are courteous and attentive . . . and are ready

At the lowest possible expense to you, a Bruning Copyflex Service Maintenance Agreement is your assurance of maximum machine performance ... your guarantee of uninterrupted Copyflex Production.

Contact your nearby Bruning branch or distributor as shown on back cover for details.

and willing to answer questions and offer advice on the operation of any machine.







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300
PARTS
SECTION

PART NO.	DESCRIPTION
2047	Quart Jar
2049	Funnel
5903	Allen Wrench Set
14813	Stopper Assembly
14817	Utility Bottle
15523	Squeegee
16101	Duster Head
17104	Stirring Rod
19311	Measuring Cup
20348	Duster

ISSUED 2/64

The part numbers listed in this Manual are standard for all Model 300 machines manufactured. Revision or replacement part numbers are accompanied by an effectivity serial number. However, to insure positive part identification, include the machine serial number in all correspondence regarding the parts of the machine.

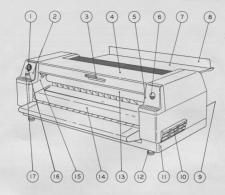


Figure 1

1		DESCRIPTION Dial (Part of 27107)	USED	NO.			
1 2		Dial (Part of 27107)			NO.	DESCRIPTION	USED
2	+27107		111	10	+19437	Grill	2
		Escutcheon Assembly - L.H.	1		<b>‡19953</b>	Push-On Fasteners	8
		Reverse Decal	1	11			l i
	26684	Forward Decal	1	12	19942	Leveling Jack	4
		Switch Clip	1	13		Print Guide Assembly	1
	21845	Twin Nut	1	14		Tracing Tray S.A.	1
		#4-36 x 1/2" Flat Hd. Sc.	2		19593	Tracing Tray	1 1
		Bruning Nameplate	1		20218	Scraper	1
		Cabinet Assembly	1		20233		2
		Caution Decal	1	15	+27106	Speed Control Unit S.A.	1
		Direction of Feed Plate	1			(Mounted inside cabinet)	
		Escutcheon Assembly - R.H.	1			(S/N 3004049 and up)	1
6		Emblem (Part of 20513)	1		20319	Speed Control Assembly	1
7	20310	Print Tray Assembly	1			(5/N 3001-3004048)	
		Print Tray Stop Assembly	1	16	18304	Control Knob	1
9	20276		1	17	27442	Reversing Switch S.A.	1
	18582		1			(Part of 27106)	
	20274	Heater Switch Decal	1		16785	Locking Lug	1
	20277	Back Panel	1		20441	Solderless Terminal	4
	20278		1		27103	Reversing Switch	1
		Back Panel Screen	1		27172	Cover	1
	27906	Lamp Switch Decal	1		27173	End Plate	1
	27097	On Decal	1		51217	#10-32 x 3/16" Oven Hd, Sc.	1
	18491	High-Voltage Decal	1		27443	Strain Relief Bushina	1
1	*Order	Separately			27444	Reversing Switch Leads	1

+Part of Cabinet S.A. - 21147

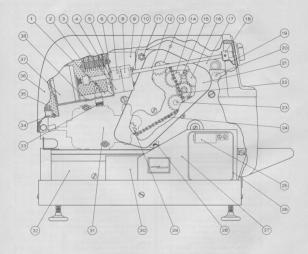


Figure 2

REF.			AMT.	REF.			AMT
NO.	NO.	DESCRIPTION	USED	NO.	NO.	DESCRIPTION	USED
	+21171		1	22	20214	Idler Gear (28T.)	1
2	+19093	Selenium Bridge	2			(S/N 3001753 and up)	
3		Switch Terminal Cover	2		*21276		1
	+21073	Switch (20 amp)	2			(S/N 3001754 and up)	
	+16391		1		*12917		1
5	+20332	Cam Shaft Bushing	1		20213		1
6	+11572	Grommet	1			(S/N 3001 - 3001753)	
7	+20333	Switch Cam	1		*20216		1
8	+20354	Switch Cam	11	23		Gear & Sprocket Assembly	1
9	19970	Heater Terminal Cover	2	24		Drive Chain	i
10	+20328	Cam Shaft S.A.	1	1		(S/N 3004049 and up)	
	+50603	#10-32 x 1/4" Set Screw	2		19943	Drive Chain	1
11	19981	Spacer	2		.,,,,	(S/N 3001 - 3004048)	
	*16275	Elastic Stop Nut	2	25	27468	Mounting Bracket	1
12		Control Rod S.A.	1	26	18447	Maintenance Decal	i
		Control Rod	11	1	10111	(Part of 20260)	
	18942	1/8" Dowel Pin	lil	27	20260	Exhaust Duct S.A.	1
13	20211	Sprocket (19T.)	11	-	18491	High Voltage Decal	i
14	18323	Gear (31T.)	11	28	15468	Wing Nut	2
	*18766		1	29	18369	Sprocket (15T.)	1
15	18344		2	1	10007	(S/N 3004049 and up)	
16	18324	Gear (38T.)	11		20212	Sprocket (10T.)	1
	*18766		1		20212	(S/N 3001 - 3004048)	
17	19975	Developer Yoke Frame Asy.	1	30	21028	Base Light Shield S.A.	1
		Stainless Steel Screw	2	1		(S/N 3001204 and up)	
	*18422	Stainless Steel Washer	2		20285	Base Light Shield S.A.	1
					20200	(5/N 3001 - 3001203)	
				31	22264		1
18	21236	Retainer Collar	1		ELLO.	(S/N 3004524 and up)	
		(S/N 3001204 and up)			18301	Drive Motor	1
	20336	Retainer Collar	1		20347		i
		(S/N 3001 - 3001203)			*28684		1
19	20331	Switch Clip (Part of 27107			20004	(For Carter Motor)	
		Escutcheon Assembly)	1		*27099		1
		(S/N 3001204 and up)		32	20265		i
20	10740	Adjustment Cam	1		+19661		2
21	27102	Chain Guard (S/N 3004049				Fuser Holder	2
		and up)	1			Grommet	1
	20355	Chain Guard	il			4 Contact Socket	1
		(S/N 3001 - 3004048)				Cabinet S.A. (see Figure 1)	1
		(5,77, 555, 5004040)		37	18302	Variable Transformer	1
						Strain Relief Bushina	1

\* Order Separately

<sup>+</sup> Part of 27106 Speed Control Unit Assembly

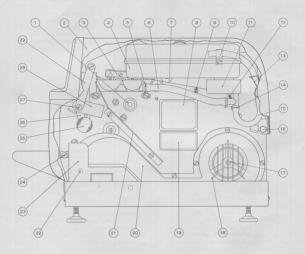


Figure 3

	PART		AMT.	REF.	PART		AMT.
NO.	NO.	DESCRIPTION	USED	NO.	NO.	DESCRIPTION	USED
-1	17476		7		18984	Female Amp Connector	1
2	21147	Cabinet S.A. (see Figure 1)	1		20668	Housing	1
3	18344	Bearing Retainer	2		20669	Mounting Bracket	1
4	19678		1		21878	Motor Bracket	1
	*19890	Bottle Cap Assembly	1		21879	Spacer	4
		(See Figure 6)			22109	Blower Motor	1
5	15517		2		20670	Blower S.A.	1
6	20229		1			(S/N 3001 - 3004048)	
7	20831			18	18476	Grill	1
	20832		1	19	21046	Patent Nameplate	1
	19827		1	20	19351	Blower Housing	1
8	21847	Nameplate	1	21	20298	Guard Plate	1
	26735	Nameplate (C.S.A.)	1	22	20290	Blower Housing Spacer	2
9	26481		1	23	20282	Light Shield S.A.	1
10	20365	Drain Hose Bracket	1		18491	High Voltage Decal	1
11	20220		1	24	20406	Thumbscrew	2
12	20255		1		+19954		1
13	18533		1		<sup>‡</sup> 19983	Spacer	1
14	20454	Hose Clamp	1		<b>*</b> 19984	Screw	1
15	20231		1	26	+19985	Crank Arm	1
16	5154		2	27	+19986	Bushing	1
17	21132	Blower S.A.	1	28	+19987	Catch	1
		(S/N 3004049 and up)		29	+19988	Link	1
	14952	Solderless Terminal	1	* Ore	der Sepa	rately	
	18322	Blower Wheel	1	+ Par	t of 198	B9 Crank S.A.	

SENIAC #300366

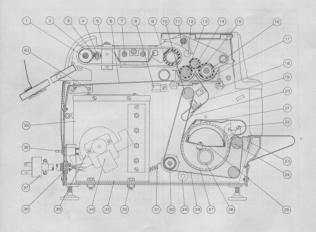


Figure 4

REF.	PART		AMT.	REF.	PART		IAMT.
NO.	NO.	DESCRIPTION	USED	NO.	NO.	DESCRIPTION	USED
1	19966	Conveyor Roller Assembly	1		*18487	Bearing	4
2	19906	Conveyor Belt	1	24	19963	Idler Roller	2
3	20383	Spring	2		*20291	Light Seal	2
4	20384	Nut	2	25	19991	Duct Assembly	1
5	20256	Conveyor Guide Assembly	2		18347	Lamp Spring	2
6	20528	Top Plate Assembly	1		18365	Twin Nut	2
7	21131	Heater and Conveyor Sup.	1		19992	Duct Mounting Plate S.A.	1
		Asy. (S/N 3004049 and up)			19993	Reflector	1
		See Figure 5.			19994	Duct Cover	1
	20203		1		21905	Twin Washer	2
		Asy. (5/N 3001-3004048)			*19292	Spacer (S/N 3001-300101)	2
8		Wire Clamp	3	26		1200 Watt Lamp	1
9	19961		1	27		Cylinder	1
10	19962		T	28	22225		15
	*17504		1			(S/N 3004349 and up)	9
111		Finger Guide Assembly	1	NEC	19905	Contact Band	15
	16275		1	1 201	22225	(S/N 3001 - 3004348)	
	18376		32	29	14075		2
	18377		31	30	20204		1
	18678		1		17476		2
	18708		1	1	18416		15
	28825		1		20205		1
		Trailing Edge Nut	11		20253		1
	*28830		1 1		20254		15
12			1		3298		1
		#10-24×1/2" Carriage Bolt	2	1 2		Stabilizer	1
13	19921		2	31			2
14			2	32	19950		4
15	20294		1	33		Lamp Control Unit Clamp	2
16	19915		1	34		Blower Motor S.A.	1
17	20234		1		18984		2
18		Trough Bracket - R.H.	1	180	21878		1
		Trough Bracket - L.H.	1		21879		4
19	20360		1		22109		1
20	20357		7	35	18322		1
21	18488		2	37	20324		1
22	19828	Rod	2			Side of Rear Panel)	
23	18486	Cylinder Roller	2	38	20364		1
	+0 1			39			1
	Order	Separately		40		Bracket - R.H.	11
					*20281	Bracket - L.H.	11

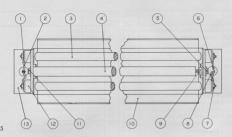


Figure 5

RFF	PART		[AMT]	a
	NO.	DESCRIPTION	USED	d
	19900	Brass Washer	4	d
2	21134	Jumper Leads S.A.	1 1	d
3	19968	Tubular Heater	2	d
4	20201	Conveyor Support Bar	1	d
5	50242	#10-32×3/4" Fil. Hd. Sc.	1	d
	*50015	#10 Flat S.A.E. Washer	1	ä
6	21135	Heater Jumper Leads S.A.	1	a
7	50107	#6-32 Brass Hex Nut	4	ď
8	21128	Wiring Harness	1	

REF.	PART		AMT.
	NO.		USED
		#10-32 Hex Nut	
		Heater Reflector	1
		#10-32×1/2" Fil. Hd. Sc.	1
		#10 Flat S.A.E. Washer	1
100	*50016	#10 Lockwasher	1
12	20202	Heater Cap	4
13	19969	Heater Mounting Bracket	2
* 0-	J C		

# BOTTLE CAP ASSEMBLY-19890

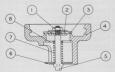
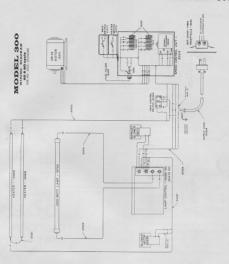
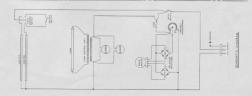
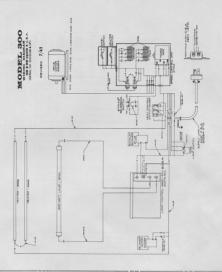


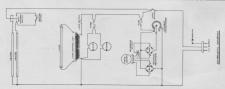
Figure 6

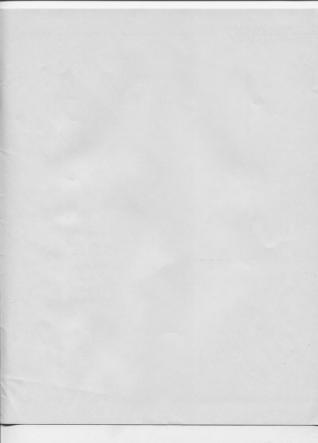
REF.	PART NO.	DESCRIPTION	AMT. USED
1	20430	Nut	1
2	19893	Washer	2
2	19719	Rubber Stopper	1
4	19813	Bottle Cap	1
5	19718	Plunger	1
6	19891	Washer	1
7	19720	Valve Spring	1
8	19892	Plunger Guide	1















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